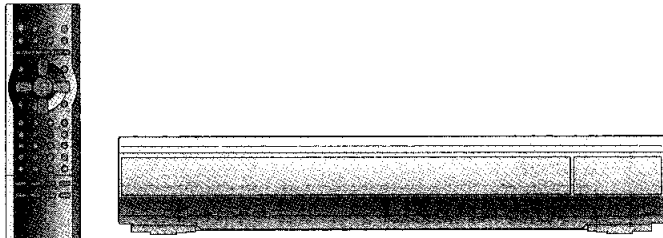


DVD/CD PLAYER

Operating Instructions

Model No. **DVD-CV52**



Panasonic

Region number supported by this player

Region numbers are allocated to DVD players and software according to where they are sold.

For the United Kingdom and Continental Europe

- The region number of this player is "2".
- The player will play DVD-Video marked with labels containing "2" or "ALL".

Example:



For Australia and N.Z.

- The region number of this player is "4".
- The player will play DVD-Video marked with labels containing "4" or "ALL".

Example:



Dear customer

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

Note

"EB" on the packaging indicates the United Kingdom.

RQT6439-B

E EB GN

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR
PERFORMANCE OF PROCEDURES OTHER THAN
THOSE SPECIFIED HEREIN MAY RESULT IN
HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR
YOURSELF. REFER SERVICING TO QUALIFIED
PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK
OR PRODUCT DAMAGE, DO NOT EXPOSE THIS
APPARATUS TO RAIN, MOISTURE, DRIPPING OR
SPASHING AND THAT NO OBJECTS FILLED WITH
LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON
THE APPARATUS.

This product may receive radio interference caused by mobile
telephones during use. If such interference is apparent, please
increase separation between the product and the mobile
telephone.

DANGER	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM. (FDA 21 CFR)
CAUTION	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. (IEC60824-1)
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	- AVATTAESSA OLET ALTIIN NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ KATSO SATEESEN.
VARNING	- SYNLIG OCH USYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN.
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
注意	- 打开时有可见及不可见激光辐射。避免激光束照射。 ここに開くと可視及び不可視のレーザー光が出ます。 ビームを直接照らす、照らすにしないでください。 RQLS0233

(Inside of product)
(Produktets innside)
(Tuotteen sisällä)

SUOMI**VAROITUS!**

LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ
KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA
ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1
YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

VAROITUS:

TULIPALO-, SÄHKÖISKUVAARAN TAI TUOTETTA
KOHTAAVAN MUUN VAHINGON VÄHENTÄMISEKSI EI
LAITETTA SAA ALTISTAA SATEELLE, KOSTEUDELLE,
VESIPISAROILLE TAI ROISKEELLE, EIKÄ NESTETTÄ
SISÄLTÄVIÄ ESINEITÄ, KUTEN ESIMERKIKSI
MALJAKOITA, SAA ASETTAA LAITTEEN PÄÄLLE.

VAROITUS!

- ÄLÄ ASENNATA TAI LAITA TÄTÄ LAITETTA KABINET-
TITYYPPISEEN KIRJAKAAPPIIN TAI MUUHUN
SULJETTUUN TILAAN, JOTTA TUULETUS ÖNNIS-
TUISI. VARMISTA, ETTÄ VERHO TAI MIKÄÄN MUU
MATERIAALI EI HUONONNA TUULETUSTA, JOTTA
VÄLTETTÄISIIN YLIKUUMENEMISESTÄ JOHTUVA
SÄHKÖISKU- TAI TULIPALOVAARA.
- ÄLÄ PEITÄ LAITTEEN TUULETUSAUUKKOJA, SA-
NOMALEHDELLÄ, PÖYTÄLIINALLA, VERHOLLA
TAI MUULLA VASTAAVALLA ESINEELLÄ.
- ÄLÄ ASETA PALAVAA KYNTTILÄÄ TAI MUUTA
AVOTULEN LÄHDETTÄ LAITTEEN PÄÄLLE.
- HÄVITÄ PARISTOT LUONTOA VAHINGOITTAMAT-
TOMALLA TAVALLA.

TÄMÄ LAITE ON TARKOITETTU KÄYTETTÄVÄKSI LEUDOSSA
ILMASTOSSA.

CAUTION!

- DO NOT INSTALL, OR PLACE THIS UNIT, IN A BOOK-
CASE, BUILT-IN CABINET OR IN ANOTHER CON-
FINED SPACE. ENSURE THE UNIT IS WELL VENTI-
LATED. TO PREVENT RISK OF ELECTRIC SHOCK OR
FIRE HAZARD DUE TO OVERHEATING, ENSURE
THAT CURTAINS AND ANY OTHER MATERIALS DO
NOT OBSTRUCT THE VENTILATION VENTS.
- DO NOT OBSTRUCT THE UNIT'S VENTILATION
OPENINGS WITH NEWSPAPERS, TABLECLOTHS,
CURTAINS, AND SIMILAR ITEMS.
- DO NOT PLACE SOURCES OF NAKED FLAMES,
SUCH AS LIGHTED CANDLES, ON THE UNIT.
- DISPOSE OF BATTERIES IN AN ENVIRONMENTAL-
LY FRIENDLY MANNER.

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

NORSK**ADVARSEL!**

DETTE PRODUKTET ANVENDER EN LASER.
BETJENING AV KONTROLLER, JUSTERINGER
ELLER ANDRE INNGREP ENN DE SOM ER
BESKREVENT I DENNE BRUKSANVISNING, KAN
FØRE TIL FARLIG BESTRÅLING.
DEKSLER MÅ IKKE ÅPNES, OG FORSØK ALDRI Å
REPARERE APPARATET PÅ EGENHÅND. ALT
SERVICE OG REPARASJONSARBEID MÅ UTFØRES
AV KVALIFISERT PERSONELL.

ADVARSEL:

FOR Å REDUSERE FAREN FOR BRANN, ELEKTRISK
STØT ELLER SKADER PÅ PRODUKTET, MÅ DETTE
APPARATET IKKE UTSETTES FOR REGN,
FUKTIGHET, VANDDRÅPER ELLER VANNSPRUT.
DET MÅ HELLER IKKE Plasseres GJENSTANDER
FYLT MED VANN, SLIK SOM BLOMSTERVASER,
OPPÅ APPARATET.

ADVARSEL!

- APPARATET MÅ IKKE Plasseres I EN
BOKHYLLE, ET INNEBYGGET KABINETT ELLER ET
ANNET LUKKET STED HVOR VENTILASJONSFOR-
HOLDENE ER UTILSTREKKELIGE. SØRG FOR AT
GARDINER ELLER LIGNENDE IKKE FORVERRER
VENTILASJONSFORHOLDENE, SÅ RISIKO FOR
ELEKTRISK SJOKK ELLER BRANN FORÅRSAKET
AV OVERHETING UNNGÅS.
- APPARATETS VENTILASJONSÅPNINGER MÅ IKKE
DEKKES TIL MED AVISER, BORDDUKER, GARDIN-
ER OG LIGNENDE.
- Plasser IKKE ÅPEN ILD, SLIK SOM LEVENDE
LYS, OPPÅ APPARATET.
- BRUKTE BATTERIER MÅ KASSERES UTEN FARE
FOR MILJØET.

DETTE APPARATET ER BEREKNET TIL BRUK UNDER
MODERATE KLIMAFORHOLD.

(The illustration shows
the model for the United
Kingdom and Continental
Europe.)



(Back of product)

**CLASS 1
LASER PRODUCT**

**LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT**

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(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below. If in any doubt please consult a qualified electrician.

IMPORTANT


The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

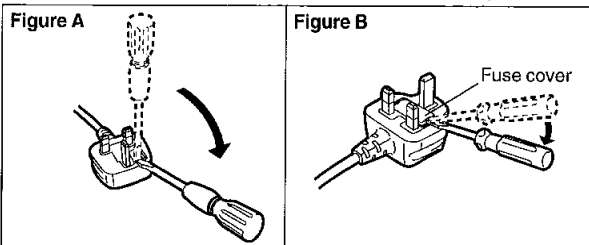
Remove the connector cover.

How to replace the fuse

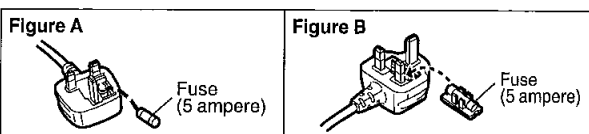
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



Accessories



Please check and identify the supplied accessories. Use numbers indicated in parentheses when asking for replacement parts.

Note

The included AC mains lead is for use with this unit only. Do not use it with other equipment.

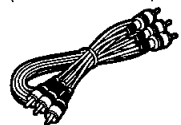
1 Remote control (N2QAJB000039)



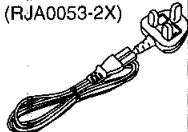
2 Batteries for remote control



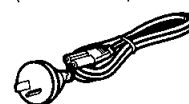
1 Audio/video cable (K2KA6CA00001)



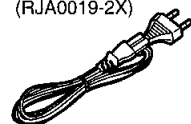
1 AC mains lead
For the United Kingdom (RJA0053-2X)



For Australia and N.Z. (RJA0035-1X)



For others (RJA0019-2X)



1 Connection

Basic connection

This page explains how to connect the unit to a television and set it up so you hear the audio through the television's speakers. To get the full benefit from the powerful 5.1-channel audio found on DVDs, you should connect an amplifier and six speakers (→ page 5).

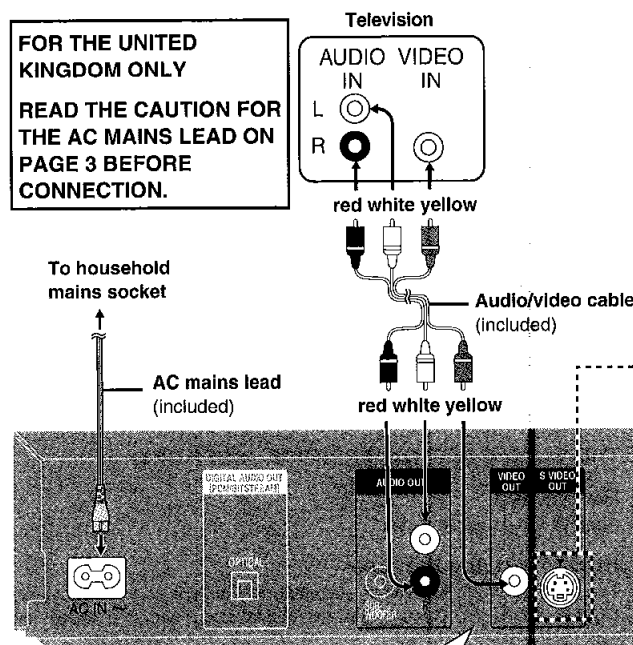
Before connection

- Disconnect the AC mains lead.
- Refer to the television's operating instructions.

Connect your unit directly to your television.

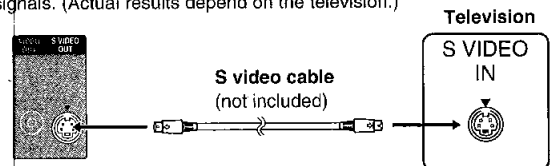
Do not connect the unit through your video cassette recorder when setting up your home entertainment system, because the picture may not be played correctly due to the copy guard.

FOR THE UNITED KINGDOM ONLY
READ THE CAUTION FOR THE AC MAINS LEAD ON PAGE 3 BEFORE CONNECTION.



S VIDEO OUT terminal

The S-video terminal achieves a more vivid picture than the VIDEO OUT terminal by separating the chrominance (C) and luminance (Y) signals. (Actual results depend on the television.)



When making this connection, ensure you connect the audio cables to the corresponding audio input terminals on the television.

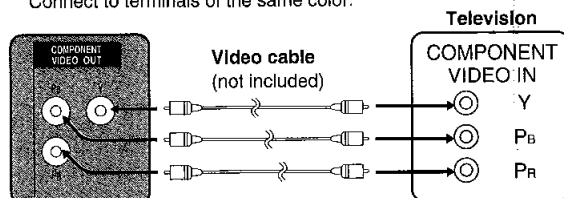
(The illustration shows the model for the United Kingdom and Continental Europe.)

For Australia and N.Z.

COMPONENT VIDEO OUT terminal

Connection using these terminals outputs the color difference signals (P_B/P_R) and luminance signal (Y) separately in order to achieve high fidelity in reproducing colors.

- The description of the component video input terminals depends on the television or monitor (e.g. Y/P_B/P_R, Y/B-Y/R-Y, Y/C_B/C_R). Connect to terminals of the same color.

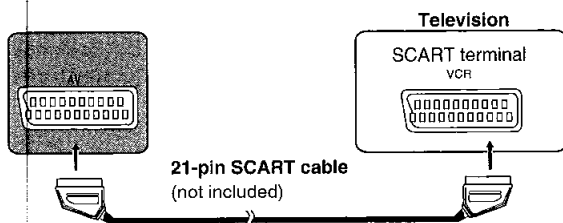


When making this connection, ensure you connect the audio cables to the corresponding audio input terminals on the television.

For the United Kingdom and Continental Europe

SCART terminal

To improve picture quality, you can change the video signal output from the AV terminal from "Video" to either "S-Video" or "RGB" to suit the type of television you are using (→ page 16, Video-AV Output).



Home Theater—Enjoying more powerful sound

This model can play Dolby Digital, but only in two channels. This model does not have a DTS decoder. You must connect a unit with a Dolby Digital or DTS decoder to enjoy surround sound.

Note

- The equipment connections described are examples.
- Peripheral equipment and optional cables sold separately unless otherwise indicated.
- Before connection, turn off all equipment and read the appropriate operating instructions.

A Digital connection

To enjoy 5.1-ch surround sound

Connect an amplifier with a built-in decoder or a decoder-amplifier combination.

- Change the settings in "Digital output" to suit the equipment you connect (⇒ page 17).

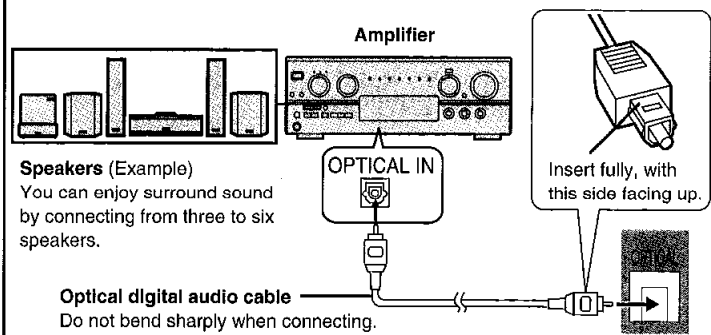
To enjoy stereo or Dolby Pro Logic

Connect a digital amplifier or system component.

- Change the settings in "Digital output" (⇒ page 17).

Note

You cannot use DTS Digital Surround decoders not suited to DVD.

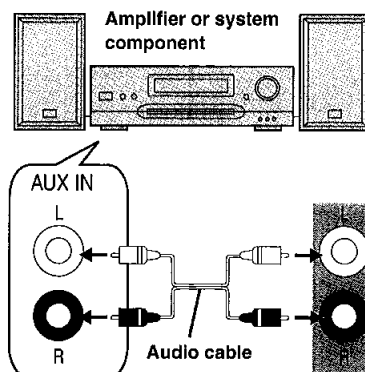


(The illustration shows the model for the United Kingdom and Continental Europe.)

B Analog connection

To enjoy stereo or Dolby Pro Logic

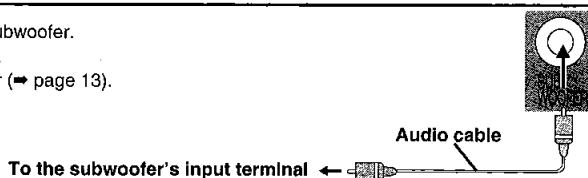
Connect an analog amplifier or system component.



Connecting an active subwoofer

You can enjoy more powerful bass by connecting an active subwoofer.

- Place the subwoofer as close as possible to the front center.
- Turn BASS PLUS on to boost the output from the subwoofer (⇒ page 13).
- Adjust the volume on the subwoofer to suit your preference.



■ Recording to digital recording equipment or cassette tapes

• Digital recording

You can record the digital signal directly to digital recording equipment. Connect the recording equipment with an optical digital audio cable (⇒ A above).

Note

- With DVD, the following conditions must be met: ① the disc doesn't have protection preventing digital recording, and ② the recording equipment can handle signals with a sampling frequency of 48 kHz.
- You cannot record DTS signals.
- You cannot record MP3.

When recording DVDs, make the following settings.

ADVANCED SURROUND: OFF (⇒ page 12)

PCM Down Conversion: Yes (⇒ page 17)

Dolby Digital: PCM (⇒ page 17)

DTS Digital Surround: Off (⇒ page 17)

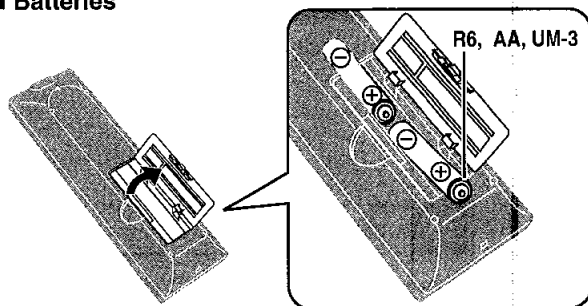
MPEG: PCM (⇒ page 17)

• Analog recording

You can record to a cassette deck or other recording equipment. Connect the recording equipment with an audio cable (⇒ B above). There are no limitations on recording analog signals as there are with digital signals.

2 The remote control

Batteries



- Insert so the poles (+ and -) match those in the remote control.
- Do not use rechargeable type batteries.

Do not:

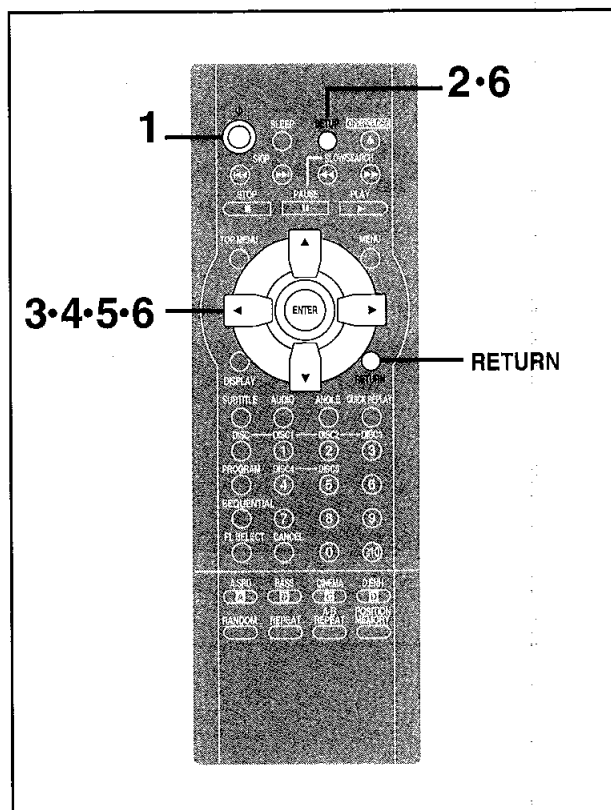
- mix old and new batteries.
 - use different types at the same time.
 - heat or expose to flame.
 - take apart or short circuit.
 - attempt to recharge alkaline or manganese batteries.
 - use batteries if the covering has been peeled off.
- Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.

Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

Use

Aim at the sensor, avoiding obstacles, at a maximum range of 7 m directly in front of the unit.

3 Quick setup



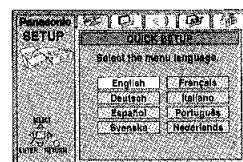
Remote control only

The **QUICK SETUP** screen appears when you press [SETUP] the first time after purchase and assists you to make necessary settings. You can access this screen again later if you need to (→ page 16, Others—QUICK SETUP).

Preparation

Turn on the television and select the appropriate video input on the television to suit the connections for the player.

- 1 Press [⏻] to turn on the unit.
- 2 Press [SETUP] to show the QUICK SETUP screen.



- 3 Press [▲, ▼, ◀, ▶] to select the menu language and press [ENTER].
- 4 Press [▲, ▼] to select "Yes" to continue and press [ENTER].
- 5 Press [▲, ▼, ◀, ▶] to select the item and press [ENTER].
 - Audio Language (For setting details → page 16)
 - Subtitle Language (For setting details → page 16)
 - TV Aspect (For setting details → "TV Aspect", below)
- 6 Press [ENTER] and then [SETUP] to end the settings.

To return to the previous screen
Press [RETURN].

TV Aspect

Select "4:3" (regular) or "16:9" (widescreen) to suit your television.

If you have a regular 4:3 television, you can also select how video on some discs is shown (→ page 16, Video—TV Aspect).

4:3 Pan&Scan (Factory preset)

The pan and scan (the original widescreen images are converted for viewing on a regular television) version of the video is automatically selected if recorded on the disc.

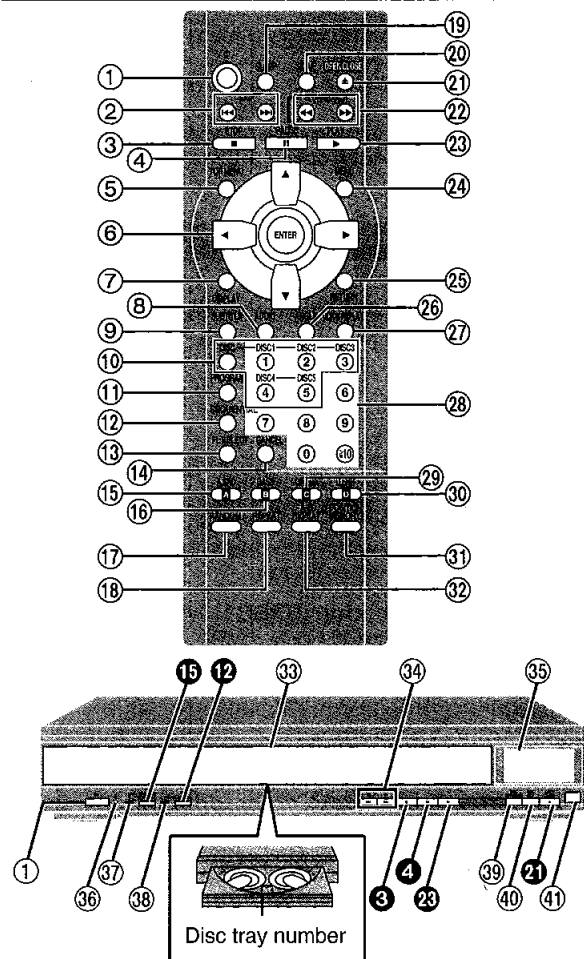


4:3 Letterbox

The letterbox (the original widescreen images appear with black bands above and below) version of the video is automatically selected if recorded on the disc.



Operations in these instructions are described mainly with the remote control, but you can do the operations on the main unit if the controls are the same.



Buttons such as 3 function the same as the controls on the remote control.

- ① Standby/on switch (⏻/⏻) 6
Press to switch the unit from on to standby mode or vice versa.
In standby mode, the unit is still consuming a small amount of power.
- ② Skip buttons (⏮, ⏭) SKIP 9
- ③ Stop button (■ STOP) 8
- ④ Pause button (⏸ PAUSE) 8
- ⑤ Top menu button (TOP MENU) 8, 11
- ⑥ Cursor buttons (⬆, ⬇, ⬆, ⬇)/Enter button (ENTER) 6
- ⑦ Display button (DISPLAY) 14
- ⑧ Audio button (AUDIO) 13
- ⑨ Subtitle button (SUBTITLE) 13
- ⑩ Disc select button (DISC), Disc buttons (DISC1 - DISC5) 8
- ⑪ Program button (PROGRAM) 10
- ⑫ Sequential button (SEQUENTIAL) 9
- ⑬ FL select button (FL SELECT) 9
- ⑭ Cancel button (CANCEL) 11
- ⑮ Advanced Surround button (A A.SRD) 12
- ⑯ Bass plus button (B BASS) 13
- ⑰ Random play button (RANDOM) 11
- ⑱ Repeat button (REPEAT) 10
- ⑲ Sleep button (SLEEP) 12
- ⑳ Setup button (SETUP) 6, 17
- ㉑ Drawer open/close button (▲ OPEN/CLOSE) 8
- ㉒ Slow/Search buttons (⏮, ⏭ SLOW/SEARCH) 9
- ㉓ Play button (▶ PLAY) 8
- ㉔ Menu button (MENU) 8, 11
- ㉕ Return button (RETURN) 6
- ㉖ Angle button (ANGLE) 13
- ㉗ Quick replay button (QUICK REPLAY) 9
- ㉘ Numbered buttons (1-9, 0, ±10) 8
- ㉙ Cinema button (C CINEMA) 13
- ㉚ Dialogue Enhancer button (D D.ENH) 13
- ㉛ Position memory button (POSITION MEMORY) 9
- ㉜ A-B repeat button (A-B REPEAT) 10
- ㉝ Drawer 8
- ㉞ Skip, Search buttons (⏮, ⏭, ⏮, ⏭) 8
- ㉟ Display
- ㊱ Standby indicator (⏻)
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
- ㊲ Advanced Surround Indicator
- ㊳ CD sequential indicator 9
- ㊴ Disc exchange button (DISC EXCHANGE) 12
- ㊵ Disc skip button (DISC SKIP) 12
- ㊶ Remote control signal sensor

Disc information

Discs that can be played

DVD-Video	DVD-R	Audio CD	Video CD
Indication used in instructions			
DVD-V		CD*	VCD

*Including CD-R/RW and discs recorded with MP3.

Do not use irregularly shaped discs (e.g. heart-shaped), as these can damage the unit.

Discs that cannot be played

DVD-Audio, DVD-ROM, DVD-RAM, CD-ROM, CDV, CD-G, +RW, DVD-RW, CVD, SVCD, SACD, Divx Video Discs and Photo CD.

DVDs that can be played

This unit has a Dolby Digital decoder so you can play DVDs with this mark.

This unit does not have a DTS decoder. Connect this unit to equipment that has a DTS decoder to enjoy DVDs with this mark.

Playing DVDs and Video CDs

The producer of these discs can control how they are played so you may not always be able to control play as described in these operating instructions. Read the disc's instructions carefully.



Video systems

This unit can play both the PAL and NTSC video systems.

To view PAL or NTSC, however, your television must match the system used on the disc.

PAL discs cannot be correctly viewed on an NTSC television.

NTSC can be correctly viewed on a PAL television by converting the video signal to PAL 60 (➡ page 16, Video- NTSC Disc Output).

CD-R and CD-RW discs

This unit can play CD-DA (digital audio) and video CD format audio CD-R and CD-RW that have been finalized (a process that enables CD-R/CD-RW players to play audio CD-R and CD-RW) upon completion of recording. It may not be able to play some CD-R or CD-RW due to the condition of the recording.

DVD-R discs

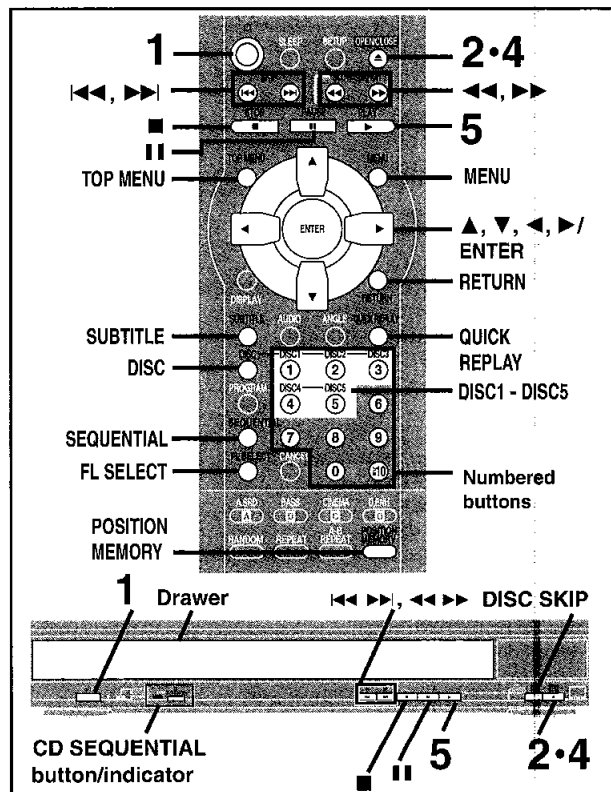
Panasonic DVD-R recorded and finalized on a Panasonic DVD video recorder are played as DVD-Video on this unit.

It may not be possible to play these discs in all cases due to the type of disc or condition of the recording.

Handling precautions

- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not attach labels or stickers to discs. (Do not use discs with exposed adhesive from tape or left over peeled-off stickers.)
- Do not use scratch-proof protectors or covers.
- Do not use discs printed with label printers available on the market.

Basic play



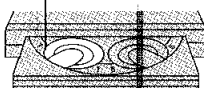
DVD-V [CD] VCD

Preparation

Turn on the television and select the appropriate video input on the television to suit the connections for the player.

- 1 Press [⏻] to turn on the unit.
- 2 Press [▲] to open the drawer.
- 3 Place the disc(s) on the disc tray(s).

You can load discs on the other trays by pressing [DISC SKIP] on the main unit.

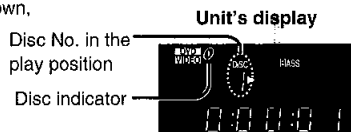


- The label of the disc must face upward. (With double-sided discs, load so the label for the side you want to play is facing up.)

- 4 Press [▲] to close the drawer.

The disc indicator will go out when the unit reads a tray as empty.

- If a menu screen is shown, see right.



- 5 Press [▶] (PLAY).

Play starts from the disc in the front-left position.

[CD] (MP3 discs)

Group and track names are displayed on the television. Press [SUBTITLE] to turn the display on or off.

When the disc finishes playing

If the sequential mode (→ page 9) is off, select the disc using the disc type information screen (→ right).

To stop play

Press [■] (→ right, Resume function).

To pause play

Press [⏸] during play.

Press [▶] (PLAY) to restart play.

To prevent damage

- Do not;
- load more than one disc per tray.
 - touch the drawer or the carousel while they are in motion.
 - rotate the carousel by hand.
 - close the drawer by hand.

Note

- If "0" appears on the television

The operation is prohibited by the unit or disc.

- The disc continues to rotate while the menu is displayed even after you finish playing an item. Press [■] when you finish to preserve the unit's motor and your television screen.
- Volume may be lower when playing DVDs than when playing other discs or during television broadcasts. If you turn the volume up on the television or amplifier, be sure to reduce the volume again before playing other sources so that a sudden increase in output does not occur.

Disc type information screen

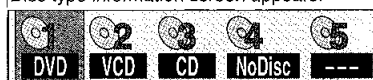
DVD-V [CD] VCD

You can check the kinds of discs loaded on the trays, and start playing the preferred disc.

Remote control only

- 1 Press [DISC].

Disc type information screen appears.



---: The unit has not determined the kind of the disc.

NoDisc: There is no disc on the tray.

- 2 Press the disc button ([DISC1] – [DISC5]).

The disc on the selected tray starts playing.

To clear the disc type information screen

Press [DISC].

Note

The other numbered buttons ([6] – [9], [0], [≧10]) do not work while the disc type information screen is displayed.

When a menu screen appears on the television

DVD-V [CD] VCD

Remote control only

Press the numbered buttons to select an item.

To select a 2-digit number

Example: To select item 23, press [≧10] → [2] → [3].

- When playing DVDs, you can also use [▲, ▼, ◀, ▶] to select items. Press [ENTER] to confirm your selection.

Play of the selected item now begins.

Other buttons used to operate menus

Read the disc's instructions for further details about operation.

[▶]: Shows the next menu.

[◀]: Shows the previous menu.

[RETURN]: Shows the menu screen. [VCD]

[TOP MENU]: Shows the first menu screen. [DVD-V]

[MENU]: Shows the menu screen. [DVD-V]

Resume function

DVD-V [CD] VCD

(When the elapsed play time is displayed)

The position you stopped play at is recorded by the unit when "▷" is flashing on the display.



While "▷" is flashing, press [▶] (PLAY) to start play from where you stopped it. (When playing DVD → page 9, Chapter Review)

- The position is cleared when the disc is changed or the unit is switched to standby.
- Press [■] to clear the position.

(Continued on next page)

Position Memory function

Remote control only

This function allows you to memorize a position to start from even after switching the unit to standby or changing discs. You can memorize positions on up to five different discs at a time. When you memorize another position, the earliest position is replaced.

- This function doesn't work if the sequential mode is on.

1. During play, press [POSITION MEMORY].

Position memorized

2. Press [⏏] to switch the unit to standby, or change the disc.
3. When you are ready to play the disc again, press [▶] (PLAY). Play starts from the memorized position and the position is cleared. (When playing DVD → Chapter Review below)

To clear the position

Press [■] before recalling the memorized position.

Chapter Review DVD-V

The message appears immediately after you press [▶] (PLAY).

Press PLAY to Chapter Review

Press [▶] (PLAY) while the message is displayed and the beginning portions of each chapter up to the current one are played. Full play resumes from the point where you pressed [■] or [POSITION MEMORY]. (This feature works only within a title.)

If you do not press [▶] (PLAY), the message disappears and play starts from where you pressed [■] or [POSITION MEMORY].

Changing the display on the main unit

Remote control only

Press [FL SELECT].

Each time you press the button:

Title/Chapter/Group/Track display



Time display



Sequential mode

DVD-V CD VCD

During play or while stopped

Press [SEQUENTIAL] ([CD SEQUENTIAL]).

Each time you press the button:

- SEQ on:** Plays all the CDs (including MP3 discs) and Video CDs once each (The CD SEQUENTIAL indicator lights).
- The playback control function on Video CDs is canceled.

- SEQ off:** Plays only one disc in the play position (This mode is on whenever you turn the unit on.)

Note

This feature doesn't work during program/random play.

Replaying a scene — QUICK REPLAY

DVD-V CD VCD

Skip back a few seconds within the current item (track or title).

Remote control only

During play

Press [QUICK REPLAY].

Note

This feature may not work while playing some parts of a disc or at all with some discs.

Skipping chapters or tracks

DVD-V CD VCD

During play or while paused

Press [◀◀] or [▶▶].

- Press [◀◀] or [▶▶] on the main unit.
- Each press increases the number of skips.

Fast forward and rewind—SEARCH

DVD-V CD VCD

During play

Press [◀◀] or [▶▶].

- Press and hold [◀◀] or [▶▶] on the main unit.
- Audio will be heard during search. You can turn this audio off if you want to (→ page 16, Audio—Audio during Search).

Slow-motion play

DVD-V VCD

While paused

Press [◀◀] or [▶▶].

- Press and hold [◀◀] or [▶▶] on the main unit.

Frame-by-frame viewing

DVD-V VCD

Remote control only

While paused

Press [◀] or [▶].

The frame changes each time you press the button.

- The frames change in succession if you press and hold the button.
- Pressing [II] also activates forward frame-by-frame.

Notes

- The speed of search and slow-motion increases up to 5 steps.
- Press [▶] (PLAY) to restart play.
- You cannot move backwards with Video CD during slow-motion and frame-by-frame.

When playing Video CDs with playback control

Pressing buttons to perform skip, search or slow-motion may take you to a menu screen.

Starting play from a selected title or track

DVD-V CD VCD

Remote control only

Press the numbered buttons to select the item.

To select a 2-digit number

Example: To select track 23, press [≥10] = [2] = [3].

[CD] (MP3 discs)

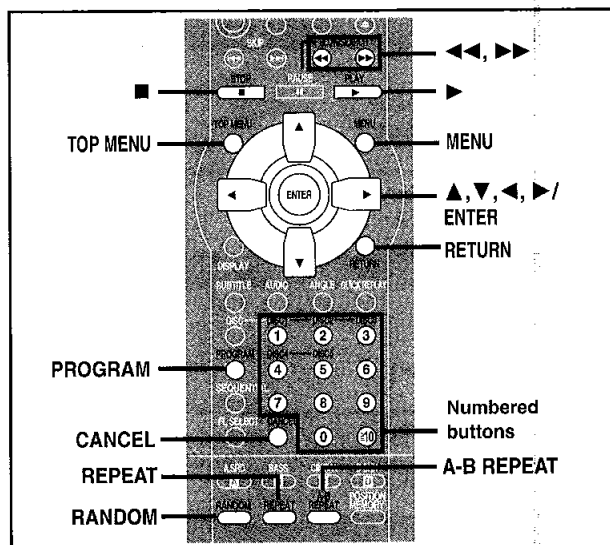
Press [ENTER] after pressing the numbered buttons. (You do not have to press [≥10].)

Play starts from the selected item.

Note

This works only when stopped with some discs.

Convenient features



DVD-V CD VCD

(When the elapsed play time is displayed)

Remote control only

Repeat play

During play

Press [REPEAT].

Each time you press the button:

DVD-V

Chapter (C)*1 → Title (T)*2 → OFF

e.g. DVD-Video



CD VCD

Track (T)*1 → Entire disc (D)*2 → All discs (S)*3

→ OFF ←

CD (MP3 discs)

Track (T)*1 → Group (G)*2 → All discs (S)*3

→ OFF ←



*1 "Chapter (1)" or "Track (1)" during program play.

*2 "All (A)" during program and random play.

*3 Only when the sequential mode is on (DVDs are skipped).

If the Video CD has playback control

1. Press [■] during play until "PBC" is cleared from the display.

2. Press the numbered buttons to select a track to start play (→ page 9).

3. Press [REPEAT] (→ above).

Note

You cannot use repeat play to repeat an entire DVD or an entire MP3 disc.

■ To repeat only your favorite tracks/chapters

Start program play (→ right) and press [REPEAT] to display "A".

A-B repeat play

You can repeat a section between points A and B within a title or track.

During play

1 Press [A-B REPEAT] at the starting point (A).

2 Press [A-B REPEAT] at the finishing point (B).



To cancel

Press [A-B REPEAT] until "A-B" is displayed.

Note

• Some subtitles recorded around point A or B may fail to appear. **DVD-V**

• The unit automatically determines the end of a title/track as point B when the end of the title/track is reached.

• A-B repeat is canceled when you press [QUICK REPLAY].

Program play

Remote control only

You can select up to 32 tracks to play in the order you choose.
(When the elapsed play time is displayed)

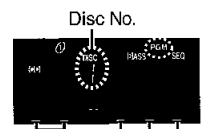
When the sequential mode is on

CD VCD

You can program all the items on discs.

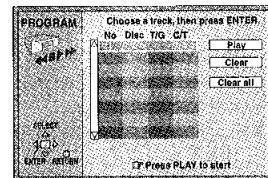
While stopped

1 Press [PROGRAM].



Group (MP3 discs) No.

Track (CD, VCD) No.



2-① Press the numbered buttons to select a disc.

-② [MP3 discs only] Press the numbered buttons to select a group.

• Some items cannot be selected.

3 Press the numbered buttons to select a track (and, for MP3 discs press [ENTER]).

• Repeat steps 2 and 3 to program other items.

4 Press [▶] (PLAY).

Play now begins in the programmed sequence.

Note

• You can enter DVDs, empty trays, and item numbers for items not recorded on discs, but they are not played.

• If the chapter or track number flashes after entering it with the numbered buttons, press [ENTER] to continue to the next item.

When the sequential mode is off

DVD-V CD VCD

You can program all the items on a disc in the play position.

While stopped

1 Press [PROGRAM].

2 [DVD, MP3 discs only] Press the numbered buttons to select a title (DVD) or group (MP3 discs).

• Some items cannot be selected.

• Different titles have different soundtracks and subtitles.

3 Press the numbered buttons to select a track (CD or VCD) or chapter (DVD) (and, for MP3 discs press [ENTER]).

• Repeat steps 2 and 3 to program other items.

4 Press [▶] (PLAY).

Play now begins in the programmed sequence.

• Some items cannot be played even if you programmed them. **DVD-V**

Note

You cannot program if there is no disc on the tray in the play position.

(Continued on next page)

To select an item using the cursor buttons

Press [ENTER] and [▲, ▼] to select an item, then press [ENTER] again to register the number.
All the items on a disc, a title or a group are selected when you select "ALL".

To add or change items

Press [▲, ▼] to select an available item, then repeat steps 2 and 3.

To move to the page before or after the one shown

Press [◀◀] or [▶▶].

To clear the programmed items one by one

Press [▲, ▼] to select the item number (No) and press [CANCEL].
(Alternatively, you can select "Clear" with [▲, ▼, ◀, ▶] and press [ENTER].)

To clear the whole program

Move to "Clear all" with [▲, ▼, ◀, ▶] and press [ENTER]. The whole program is also cleared when the disc is moved out of the play position while the sequential mode is off or if you turn the unit off.

To exit the program mode

Press [PROGRAM] while stopped. (The program is retained in memory.)

Random play

Remote control only

(When the elapsed play time is displayed)

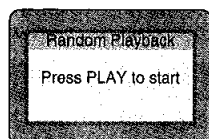
When the sequential mode is on

CD VCD

You can play all discs in random order.

While stopped

1 Press [RANDOM].



2 Press [▶] (PLAY).

Play now begins in random order.

To exit the random mode

Press [RANDOM] while stopped.

Note

- DVDs and empty trays are skipped during random play.
- The playback control function on Video CDs is canceled.

When the sequential mode is off

DVD-V CD VCD

You can play all the items on a disc in the play position in random order.

While stopped

1 Press [RANDOM].

2 Press the numbered buttons to select a title (DVD only) and press [▶] (PLAY).

- Some titles cannot be selected. **DVD-V**

Play now begins in random order.

To exit the random mode

Press [RANDOM] while stopped.

Note

The playback control function on Video CDs is canceled.

Using menus to play MP3 discs

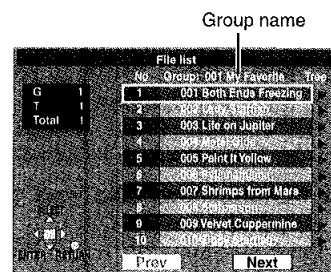
CD (MP3 discs)

This unit can play MP3 files recorded on CD-R/RW with a computer.
Files are treated as tracks and folders are treated as groups.

Remote control only

1 Press [TOP MENU] or [MENU].

A file list appears.



2 Press [▲, ▼] to select the track and press [ENTER].

Play starts and continues to the last track in the last group.

"C" indicates the track currently playing.

To show other pages

Press [▲, ▼, ◀, ▶] to select "Prev" or "Next" and press [ENTER].

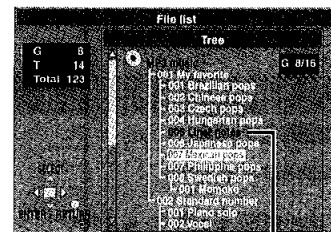
After listing all the tracks in one group, the list for the next group appears.

To close the file list screen

Press [TOP MENU] or [MENU].

Using the tree screen to find a group

1 Press [▶] while a track is highlighted to display the tree screen.



You cannot select groups that contain no compatible files.

2 Press [▲, ▼] to select a group and press [ENTER].

The file list for the group appears.

For your reference

Press [◀, ▶] to jump layers in the tree screen.

To return to the file list screen

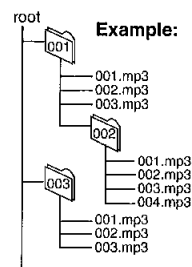
Press [RETURN].

Note

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats). MP3 files must have the extension ".MP3" or ".mp3".
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- This unit is not compatible with ID3 tags.
- This unit is not compatible with files with a sampling rate of 32 kHz.

Naming folders and files

At the time of recording, prefix folder and file names with 3-digit numbers in the order you want to play them (this may not work at times).



Changing other discs during play

DVD-V CD VCD

You can change the other discs without interrupting play.

Main unit only

- 1 Press [▲] to open the drawer.
- 2 Press [DISC SKIP] to rotate the disc tray to the desired position.
The carousel will move clockwise by one disc tray. Then, each press moves the carousel in the opposite direction by two disc trays.
- 3 Change the disc and press [▲] to close the drawer.

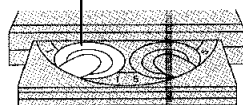
Changing the disc in the play position

DVD-V CD VCD

Main unit only

During play or while stopped

- 1 Press [DISC EXCHANGE].
Play is stopped (if pressed during play), the drawer opens and the disc tray that was in the play position comes to the front-left position.



- 2 Change the disc in the front-left position.
- 3 Press [DISC EXCHANGE].
The drawer closes and play begins from the new disc.

Setting the unit to turn off — SLEEP timer

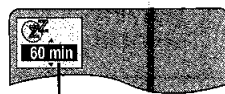
DVD-V CD VCD

Remote control only

Press [SLEEP] to select the setting.

Each time you press the button:
OFF → AUTO → 60 min → 90 min → 120 min

*The unit turns off 5 minutes after play finishes.



The unit turns off after 60 minutes.

To cancel the SLEEP timer

Press [SLEEP] to select "OFF".

To confirm the remaining time

Press [SLEEP].

Note

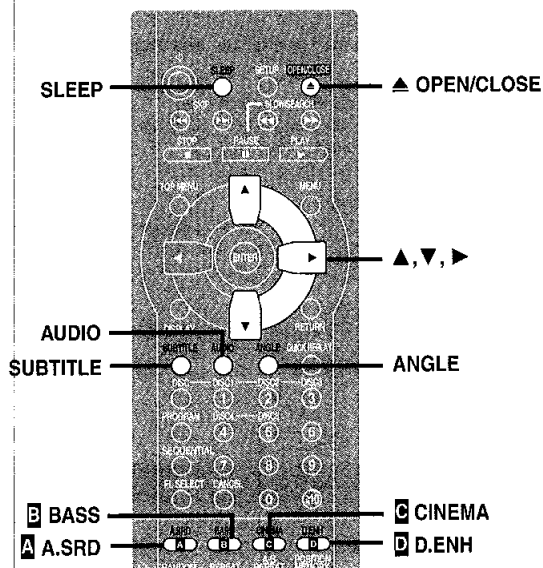
- AUTO also works with DVDs that show a menu after play finishes.
- AUTO does not work if you press [■], [MENU], or [TOP MENU]. It is activated again when you restart play.
- AUTO does not work correctly with some discs (e.g., if menus appear after playing video CDs).

■ Auto standby

The unit switches to standby mode after about 30 minutes in the stop mode, irrespective of the SLEEP setting.

DISC SKIP

DISC EXCHANGE ▲ OPEN/CLOSE



Use the **A B C D** buttons to control the following features, used to enhance your enjoyment of movies.

Note

Turn ADVANCED SURROUND and BASS PLUS off when using Dolby Pro Logic. Dolby Pro Logic will not work correctly if they are on.

A ADVANCED SURROUND

DVD-V (Dolby Digital, 2-channel or over only)

Use ADVANCED SURROUND V.S.S. (Virtual Surround Sound) to enjoy a surround-like effect if you are using 2 front speakers.

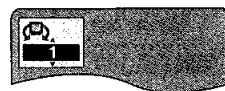
If you are playing a disc with surround effects recorded on it, the effect is broadened and sound seems to come from virtual speakers on either side.

During play

Press [**A** A.SRD].

Each time you press the button:

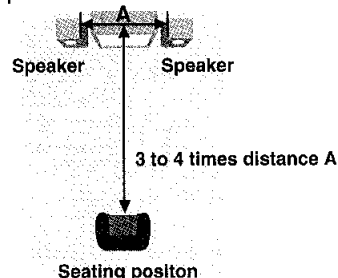
- 1: Natural effect
- 2: Emphasized effect
- OFF: Cancel (Factory preset)



Optimum seating position

<When using the television's speakers>

Distance A=Television's width



Note

- ADVANCED SURROUND will not work, or will have less effect with some discs.
- Turn off the surround sound effects on the equipment you have connected when using this effect.
- Turn ADVANCED SURROUND off if it causes distortion.

B BASS PLUS

DVD-V CD VCD

Remote control only

Turn BASS PLUS on when you have connected an active subwoofer to the SUBWOOFER terminal on the rear of the unit (→ page 5).

Press [**B** BASS].

Each time you press the button:

- OFF
- ↓
- 1: Natural bass effect (Factory preset)
- ↓
- 2: Emphasized bass effect



C CINEMA

DVD-V VCD

Remote control only

You can change the picture quality for movie viewing.

Press [**C** CINEMA].

Each time you press the button:

- Cin.1: Mellow images and enhances detail in dark scenes.
- ↓
- Cin.2: Sharpens images and enhances detail in dark scenes.
- ↓
- Nor.: Normal mode (Factory preset)



For your reference

You can make finer adjustments to the picture if desired (→ page 15, Video menu, Digital picture mode—User mode).

D DIALOGUE ENHANCER

DVD-V (Dolby Digital, 3-channel or over, where the dialogue is recorded in the center channel)

Remote control only

This mode makes the dialogue in movies easier to hear.

Press [**D** D.ENH].

Each time you press the button:

ON → OFF (Factory preset)



Note

DIALOGUE ENHANCER will not work or will have less effect with some discs.

DVD-V

Remote control only

Some DVDs have multiple soundtracks, subtitle languages and camera angles, and you can change these during play.

- “—” or “—” is displayed instead of the language number in circumstances such as when no languages is recorded on the disc.

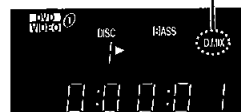
Soundtracks

During play

Press [AUDIO].

The number changes each time you press the button.

Indicates that a multi-channel soundtrack can be down-mixed to two channels.



- You can also use this button to turn the vocals on and off on karaoke discs. Read the disc's instruction for details.
- Refer to [B] on page 15 for audio signal type details.

Subtitles

During play

Press [SUBTITLE].

The number changes each time you press the button.



- In some cases, the subtitle language is not changed to the selected one immediately.

To clear/display the subtitles

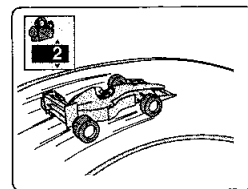
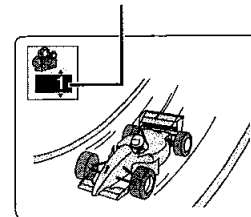
1. Press [SUBTITLE].
2. Press [▶].
3. Press [▲, ▼] to select “OFF” or “ON”.

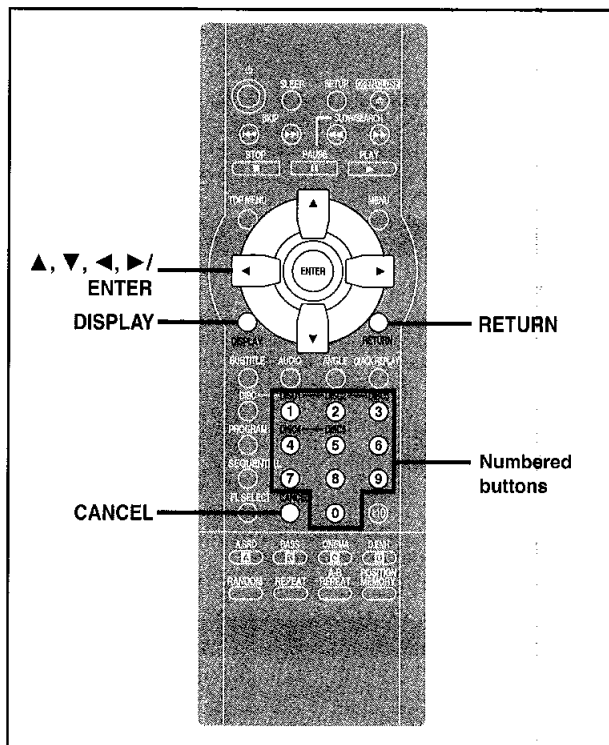
Angles

During play

Press [ANGLE].

The number changes each time you press the button.





GUI screens are menus that contain information about the disc or unit. These menus allow you to perform operations by changing this information.

Common procedures

DVD-V [CD] [VCD]

Remote control only

- 1 Press [DISPLAY].
Each time you press the button:
Disc information → Progress indicator
Original display ← Unit information (→ step 2)
- 2 [Unit Information only]
While the leftmost icon is highlighted
Press [▲, ▼] to select the menu.
Each time you press the button:
Play menu ↔ Video menu
Display menu ↔ Audio menu
- 3 Press [◀, ▶] to select the item.
- 4 Press [▲, ▼] to select the setting.
 - Items with "▲" or "▼" above and below can be changed by [▲, ▼].
 - Press [ENTER] if the setting does not change after pressing [▲, ▼].
 - Some items require different operations. Read the following explanations.

For your reference

- Depending on the condition of the unit (playing, stopped, etc.) and the type of software you are playing, there are some items that you cannot select or change.
- When numbers are displayed (e.g. title No.), the numbered buttons are also effective for setting. After entering numbers, press [ENTER] to register the setting.

To clear the icons

Press [RETURN] until the menus disappear.

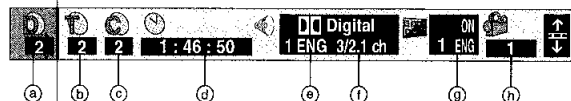
To change the position of the icons

1. Press [◀, ▶] to select the rightmost icon.
2. Press [▲, ▼] to move the icons.
(There are 5 positions.)

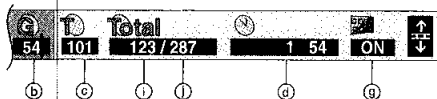


Disc information

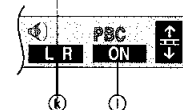
e.g. DVD-Video



e.g. MP3 disc



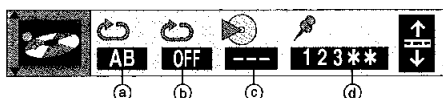
e.g. Video CD



- a D: Disc number DVD-V [CD] [VCD]
- b T: Title number DVD-V
- c T: Track number [CD] [VCD]
- d G: Group number [CD] (MP3 discs)
- e C: Chapter number DVD-V
- f T: Track number in group [CD] (MP3 discs)
- g Time DVD-V
 - Press [▲, ▼] to show the elapsed play time or remaining time for the title (or chapter during program and random play).
 - Select a position to start play by specifying a time with the numbered buttons and press [ENTER].
- h Changing the time display [CD] [VCD]
Press [▲, ▼] to show the elapsed play time, remaining time for the track, or remaining time for the disc.
- i Elapsed play time [CD] (MP3 discs)
(display only, cannot be changed)
- j Soundtrack language DVD-V (→ page 13)
(See A on page 15 for language abbreviations.)
- k Audio signal type DVD-V (→ page 13)
(See B on page 15 for details.)
Karaoke vocal on/off (Karaoke DVD only) DVD-V
Solo: OFF or ON
Duet: OFF, V1 + V2, V1 or V2
- l Subtitle language DVD-V (→ page 13)
(See A on page 15 for language abbreviations.)
Subtitles on/off DVD-V
ON ↔ OFF
Group/Track name display on/off [CD] (MP3 discs)
ON ↔ OFF
- m Angle number DVD-V (→ page 13)
- n Track number in disc [CD] (MP3 discs)
- o Total number of tracks on disc [CD] (MP3 discs)
- p Audio mode [VCD]
L ↔ R
- q Menu play [VCD] (with playback control only)
Indicates whether menu play (playback control) is on or off.

Unit information

Play menu

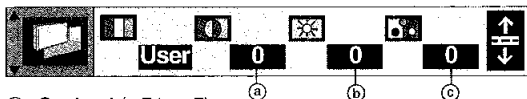


- (a) A-B repeat** **DVD-V** **CD** **VCD** (⇒ page 10)
[ENTER] (start point) ⇒ [ENTER] (finish point)
To cancel: [ENTER]
- (b) Repeat play** (⇒ page 10)
DVD-V **CD** (MP3 discs)
Chapter (C)^{#1} ⇄ Title (T)^{#2} Track (T)^{#1} ⇄ Group (G)^{#2}
↑ → OFF ⇄ All discs (S)^{#3} ⇄
CD **VCD**
Track (T)^{#1} ⇄ Entire disc (D)^{#2}
↑ → OFF ⇄ All discs (S)^{#3} ⇄
^{#1} "Chapter (1)" or "Track (1)" during program play.
^{#2} "All (A)" during program and random play.
^{#3} Only when the sequential mode is on (DVDs are skipped).
- (c) Play mode display** **DVD-V** **CD** **VCD**
---: Normal play PGM: Program play RND: Random play
- (d) Marker** **DVD-V** **CD** **VCD**
You can mark up to 5 positions to play again.
[ENTER] (The unit is now ready to accept markers.)
To mark a position: [ENTER] (at the desired point)
To mark another position: [◀, ▶] ⇒ [ENTER]
To recall a marker: [◀, ▶] ⇒ [ENTER]
To erase a marker: [◀, ▶] ⇒ [CANCEL]

Video menu



- Digital picture mode** **DVD-V** **CD** **VCD** (⇒ page 13, CINEMA)
Nor.: Normal mode
Cin.1: Mellow images and enhances detail in dark scenes
Cin.2: Sharpens images and enhances detail in dark scenes
User: User mode
The following items are also displayed when you select "User".

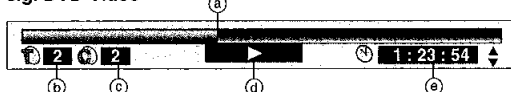


- (a) Contrast** (-7 to +7)
(b) Brightness (0 to +15)
(c) Color (-7 to +7)

Progress indicator

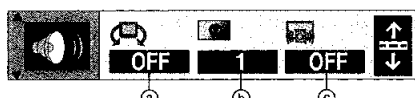
Indicates how far you have played through an item.

e.g. DVD-Video



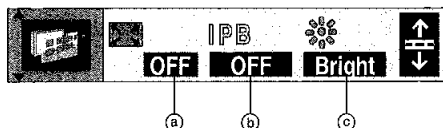
- (a) Current position** **DVD-V** **CD** **VCD**
(b) T: Title number **DVD-V**
(c) T: Track number **CD** **VCD**
(d) G: Group number **CD** (MP3 discs)
(e) C: Chapter number **DVD-V**
(f) T: Track number in group **CD** (MP3 discs)
(g) Condition – play, pause, or slow/search **DVD-V** **CD** **VCD**
(h) Time **DVD-V**
• Press [▲, ▼] to show the elapsed play time or remaining time for the title (or chapter during program and random play).
• Select a position to start play by specifying a time with the numbered buttons and press [ENTER].
Changing the time display **CD** **VCD**
Press [▲, ▼] to show the elapsed play time or remaining time for the track.
Elapsed play time **CD** (MP3 discs)
(display only, cannot be changed)

Audio menu



- (a) ADVANCED SURROUND** **DVD-V** (⇒ page 12)
1 ⇄ 2 ⇄ OFF
↑
(b) BASS PLUS **DVD-V** **CD** **VCD** (⇒ page 13)
1 ⇄ 2 ⇄ OFF
↑
(c) DIALOGUE ENHANCER **DVD-V** (⇒ page 13)
ON ⇄ OFF

Display menu



- (a) 4:3 TV ZOOM** **DVD-V**
ON ⇄ OFF
Expand a letterbox picture (⇒ page 6) to fill more of a regular 4:3 aspect television (The sides of the picture are cut off when you select ON).
• 4:3 TV ZOOM is cleared when you change discs or switch the unit to standby.
• Depending on the video format of the disc and current play status, this feature may not work as described.
• Menus may act or appear differently while 4:3 TV ZOOM is on.
- (b) IPB display** **DVD-V** (⇒ Back cover, Glossary)
ON ⇄ OFF
Displays the picture type (I/P/B) in the still picture mode.
- (c) Display dimmer** **DVD-V** **CD** **VCD**
Changes the brightness of the unit's display.
Bright ⇄ Dim ⇄ Auto* (**DVD-V** **CD** **VCD**)
↑
*The display is dimmed during play, but brightens when you perform operations such as slow-motion, search, and pause.

A Audio/Subtitle language

ENG: English	SVE: Swedish	CHI: Chinese
FRA: French	NOR: Norwegian	KOR: Korean
DEU: German	DAN: Danish	MAL: Malay
ITA: Italian	POR: Portuguese	VIE: Vietnamese
ESP: Spanish	RUS: Russian	THA: Thai
NLD: Dutch	JPN: Japanese	*: Others

B Signal type/data






LPCM/□□□	Digital/DTS/MPEG: Signal type
k (kHz):	Sampling frequency
b (bit):	Number of bits
ch (channel):	Number of channels

Example: 3/2, 1ch

- 1: Subwoofer signal
(not displayed if there is no subwoofer signal)
- 0: No surround
1: Mono surround
2: Stereo surround (left/right)
- 1: Center
2: Front left+Front right
3: Front left+Front right+Center

Changing settings

This chart shows the settings for this unit. Change the settings to suit your preferences and to suit the unit to the environment in which it is being used. These settings are retained in memory until they are changed, even if the unit is turned off. See page 17 for details on menu operation.

Menus	Items	Options (Underlined items are the factory preset.)
 Disc	Audio <u>DVD-V</u> Choose the preferred audio language.	<u>English</u> French German Italian Spanish Portuguese Swedish Dutch Original* ¹ Other *** ²
	Subtitle <u>DVD-V</u> Choose the preferred subtitle language.	<u>Automatic</u> * ³ English French German Italian Spanish Portuguese Swedish Dutch Other *** ²
	Menus <u>DVD-V</u> Choose the preferred language for disc menus.	<u>English</u> French German Italian Spanish Portuguese Swedish Dutch Other *** ²
	Ratings <u>DVD-V</u> Set a ratings level to limit DVD-Video play. •The password screen is shown if you choose levels 0 to 7 or if you choose "Ratings" when levels 0 to 7 have been selected (⇒ page 17). •Select "Level 0" to prevent play of discs that do not have ratings levels recorded on them.	Setting ratings (When level 8 is selected) 8 <u>No Limit</u> 1 to 7* ⁴ 0 Lock All <hr/> Changing ratings (When level 0-7 is selected) Unlock Player Change Password Change Level Temporary Unlock
 Video	TV Aspect (⇒ page 6) Choose the setting to suit your television and preference.	<u>4:3 Pan&Scan</u> 4:3 Letterbox 16:9
	For the United Kingdom and Continental Europe AV Output (⇒ page 4) Choose the video signal format to be output from the SCART terminal.	<u>Video</u> S-Video RGB
	Still Mode (⇒ Back cover, Glossary) Specify the type of picture shown when paused.	<u>Automatic</u> Field Frame
	NTSC Disc Output Choose whether PAL 60 or NTSC signals are output during playback of NTSC discs (⇒ page 7).	PAL 60: when connected to a PAL television. NTSC: when connected to an NTSC television.
 Audio	PCM Down Conversion <u>DVD-V</u> (⇒ page 17)	No Yes
	Dolby Digital <u>DVD-V</u> (⇒ page 17)	<u>Bitstream</u> PCM
	DTS Digital Surround <u>DVD-V</u> (⇒ page 17)	<u>Off</u> Bitstream
	MPEG <u>DVD-V</u> (⇒ page 17)	<u>PCM</u> Bitstream
	D. Range Compression <u>DVD-V</u> Dolby Digital only (⇒ Back cover, Glossary) Change the dynamic range for late night viewing.	<u>Off</u> On
	Audio during Search Choose whether to have sound during search.	On Off
 Display	Menu Language Choose the preferred language for these menus and the on-screen messages.	<u>English</u> Français Deutsch Italiano Español Português Svenska Nederlands
	On-Screen Messages Choose whether to show on-screen messages or not.	On Off
 Others	Demo A demonstration of the unit's on-screen displays starts when you select "On". The demonstration stops when you press a button and the setting reverts to "Off".	Off On
	QUICK SETUP (⇒ page 6) Answer questions to make basic settings.	Yes <u>No</u>

*¹ The original language of each disc will be selected.

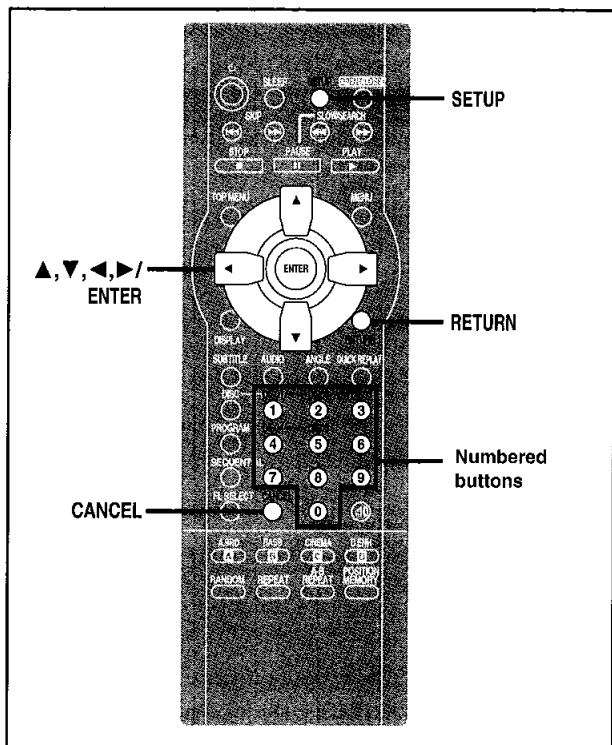
*² Input a code number with the numbered buttons (see below).

*³ If the language selected for "Audio" is not available, subtitles of that language will automatically appear if available on that disc.

*⁴ Prohibits play of DVD-Video with corresponding ratings recorded on them.

Language code list

Abkhazian: 6566	Byelorussian: 6669	Georgian: 7565	Kashmiri: 7583	Mongolian: 7778	Serbo-Croatian: 8372	Tigrinya: 8473
Afar: 6565	Cambodian: 7577	German: 6869	Kazakh: 7575	Nauru: 7865	Shona: 8378	Tonga: 8479
Afrikaans: 6570	Catalan: 6765	Greek: 6976	Kirghiz: 7589	Nepali: 7869	Sindhi: 8368	Turkish: 8482
Albanian: 8381	Chinese: 9072	Greenlandic: 7576	Korean: 7579	Norwegian: 7879	Singhalese: 8373	Turkmen: 8475
Ameharic: 6577	Corsican: 6779	Guarani: 7178	Kurdish: 7585	Oriya: 7982	Slovak: 8375	Twi: 8487
Arabic: 6582	Croatian: 7282	Gujarati: 7185	Laotian: 7679	Pashto, Pushto: 8083	Slovenian: 8376	Ukrainian: 8575
Armenian: 7289	Czech: 6783	Hausa: 7265	Latin: 7685	Persian: 7065	Somali: 8379	Urdu: 8582
Assamese: 6583	Danish: 6865	Hebrew: 7387	Latvian, Lettish: 7686	Polish: 8076	Spanish: 6983	Uzbek: 8590
Aymara: 6588	Dutch: 7876	Hindi: 7273	Lingala: 7678	Portuguese: 8084	Sundanese: 8385	Vietnamese: 8673
Azerbaijani: 6590	English: 6978	Hungarian: 7285	Lithuanian: 7684	Punjabi: 8065	Swahili: 8387	Volapük: 8679
Bashkir: 6665	Esperanto: 6979	Icelandic: 7383	Macedonian: 7775	Quechua: 8185	Swedish: 8386	Welsh: 6789
Basque: 6985	Estonian: 6984	Indonesian: 7378	Malagasy: 7771	Rhaeto-Romance: 8277	Tagalog: 8476	Wolof: 8779
Bengali, Bangla: 6678	Faroese: 7079	Interlingua: 7365	Malay: 7783	Romanian: 8279	Tajik: 8471	Xhosa: 8872
Bhutani: 6890	Fiji: 7074	Irish: 7165	Malayalam: 7776	Russian: 8285	Tamil: 8465	Yiddish: 7473
Bihari: 6672	Finnish: 7073	Italian: 7384	Maltese: 7784	Samoan: 8377	Tatar: 8484	Yoruba: 8979
Breton: 6682	French: 7082	Japanese: 7465	Maori: 7773	Sanskrit: 8365	Telugu: 8469	Zulu: 9085
Bulgarian: 6671	Frisian: 7089	Javanese: 7487	Marathi: 7782	Scots Gaelic: 7168	Thai: 8472	
Burmese: 7789	Galician: 7176	Kannada: 7578	Moldavian: 7779	Serbian: 8382	Tibetan: 6679	

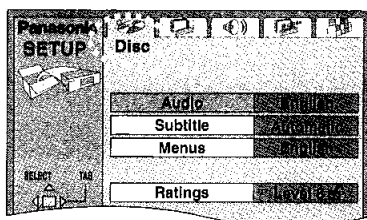


Common procedures

Remote control only

See page 16 for menu and option details.

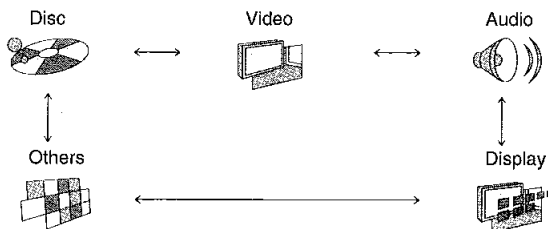
1 Press [SETUP] to show the menus.



- The QUICK SETUP screen appears when you press [SETUP] the first time after purchase (→ page 6).

2 Press [◀, ▶] to select the menu's tab.

The screen changes to display the menu.



3 Press [▲, ▼] to select the item you want to change and press [ENTER].

4 Press [▲, ▼, ▶, ◀] to select the option and press [ENTER].

The screen now shows the menu again.

To return to the previous screen
Press [RETURN].

When you are finished
Press [SETUP].

Entering a password (Ratings)

DVD-V

The password screen is shown when you select levels 0 to 7.

- Input a 4-digit password with the numbered buttons and press [ENTER].
 - If you enter a wrong number, press [CANCEL] to erase it before you press [ENTER].
 - The lock symbol appears closed to show the rating is locked.
 - **Do not forget your password.**
- Press [ENTER] to confirm the 4 digits.

Now, when you insert a DVD-Video that exceeds the ratings limit you set, a message appears on the television.
Follow the on-screen instructions.

Digital output

DVD-V

Change the settings when you have connected equipment through this unit's DIGITAL AUDIO OUT terminal (OPTICAL).

PCM Down Conversion

Select how to output audio with a sampling frequency of 96 kHz. Select "Yes" if the equipment you connect cannot process signals with a sampling frequency of 96 kHz.

- Select "No" if you use analog connection irrespective of the type of equipment.

No (Factory preset):

Output as 96 kHz. There is no output if the disc has copy protection. Select "Yes" in this case.

Yes:

Converted to 48 kHz for output.

Dolby Digital, DTS Digital Surround and MPEG

Bitstream: (Factory preset for Dolby Digital)

Select if the equipment you connected can decode the signal.

PCM: (Factory preset for MPEG)

Select if the equipment you connected cannot decode the signal.

Off: (Factory preset for DTS Digital Surround)

Select if the equipment you connected cannot decode the signal.

IMPORTANT

If the equipment you connected cannot decode the signal, the setting must be changed to PCM or Off. If not, signals the equipment cannot process will be output by this unit, causing high levels of noise which can damage your hearing and the speakers.

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"DTS", "DTS Digital Surround" and "DTS Digital Out" are registered trademarks of Digital Theater Systems, Inc.

Specifications

Signal system: PAL625/50, PAL525/60, NTSC
Operating temperature range: +5 to +35 °C
Operating humidity range: 5 to 90 % RH (no condensation)

Discs played [8 cm or 12 cm]:

- (1) DVD-Video, DVD-R (DVD-Video compatible)
- (2) CD-Audio (CD-DA)
- (3) Video CD
- (4) CD-R/CD-RW (CD-DA, Video CD formatted discs)
- (5) MP3
 - Maximum number of tracks and groups recognizable: 999 tracks and 99 groups
 - Compatible compression rate: between 32 kbps and 320 kbps

Video output:

Output level: 1 Vp-p (75 Ω)
 Output terminal:
For the United Kingdom and Continental Europe: Pin jack (1 system)/AV
For Australia and N.Z.: Pin jack (1 system)

S video output:

Y output level: 1 Vp-p (75 Ω)
 C output level: NTSC; 0.286 Vp-p (75 Ω)
 PAL; 0.300 Vp-p (75 Ω)

Output terminal:

For the United Kingdom and Continental Europe: S terminal (1 system)/AV
For Australia and N.Z.: S terminal (1 system)

Component video output: **For Australia and N.Z.**

Y output level: 1 Vp-p (75 Ω)
 P_B output level: 0.7 Vp-p (75 Ω)
 P_R output level: 0.7 Vp-p (75 Ω)
 Output terminal: Pin jack (1 system)
 (Y: green, P_B: blue, P_R: red)

RGB video output: **For the United Kingdom and Continental Europe**

R output level: 0.7 Vp-p (75 Ω)
 G output level: 0.7 Vp-p (75 Ω)
 B output level: 0.7 Vp-p (75 Ω)
 Output terminal: AV (1 system)

Audio output:

Output level: 2 Vrms (1 kHz, 0 dB)

Output terminals:

For the United Kingdom and Continental Europe: Pin jack/AV

For Australia and N.Z.: Pin jack

Number of terminals:

2ch: 1 system
 Subwoofer output (0.1ch): 1 system

Audio performance:

- (1) Frequency response:
 - DVD (linear audio): 4 Hz–22 kHz (48 kHz sampling)
4 Hz–44 kHz (96 kHz sampling)
 - CD audio: 4 Hz–20 kHz
- (2) S/N ratio:
 - CD audio: 115 dB
- (3) Dynamic range:
 - DVD (linear audio): 102 dB
 - CD audio: 98 dB
- (4) Total harmonic distortion:
 - CD audio: 0.0025 %

Digital audio output:

Optical digital output: Optical terminal
Pickup: Wave length: 658 nm/790 nm
 Laser power: CLASS 2/CLASS 1

NORSK

Pickup: Bølgelengde: 658 nm/790 nm
 Laser-styrke: Ingen farlig stråling sendes ut
 KLASSE 2/KLASSE 1

Power supply:

Power consumption: 14 W
Dimensions: 430 (W)×406.5 (D)×75.8 (H) mm
Mass: 4.5 kg

Power consumption in standby mode: approx. 3.8 W

Note

Specifications are subject to change without notice.
 Mass and dimensions are approximate.

Glossary

Bitstream

This is the digital form of multiple channel audio data (e.g., 5.1 channel) before it is decoded into its various channels.

Decoder

A decoder restores the coded audio signals on DVDs to normal. This is called decoding.

Dolby Digital

This is a method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2-channel) audio, these signals can also be 5.1-channel audio. A large amount of audio information can be recorded on one disc using this method.

Dolby Pro Logic

A surround system where a 4-channel audio track is recorded as 2 channels and then is restored to 4 channels for play. The surround channel is monaural and can reproduce up to 7 kHz.

DTS (Digital Theater Systems)

This surround system is used in many movie theaters around the world. There is good separation between the channels, so realistic sound effects are possible.

Dynamic range

Dynamic range is the difference between the lowest level of sound that can be heard above the noise of the equipment and the highest level of sound before distortion occurs.

Frame still and field still

Frames are the still pictures that go together to make a moving picture. There are about 30 frames shown each second.
 One frame is made up of two fields. A regular television shows these fields one after the other to create frames.
 A still is shown when you pause a moving picture. A frame still is made up of two alternating fields, so the picture may appear blurred, but overall quality is high. A field still is not blurred, but it has only half the information of a frame still so picture quality is lower.

I/P/B

MPEG 2, the video compression standard adopted for use with DVD-Video, codes frames using these 3 picture types.

I: Intra coded picture (I-picture)

This is the standard picture and is a complete picture in itself. This means it has the best picture quality and is the best to use when adjusting the picture.

P: Predictive coded picture (P-picture)

This picture is calculated based on past I or P-pictures.

B: Bidirectionally-predictive coded picture (B-picture)

This picture is calculated by comparing past and future I and P-pictures so it has the lowest volume of information.

Linear PCM (pulse code modulation)

These are uncompressed digital signals, similar to those found on CDs.

Playback control (PBC)

If a Video CD has playback control, you can select scenes and information with menus (called menu play in these instructions).